

TIN STATISTICS

By Carl A. DiFrancesco and James F. Carlin, Jr.

[All values in metric tons (t) unless otherwise noted]

Year	Primary production	Secondary production	Imports	Exports	Government shipments	Government stocks	Industry stocks	Apparent consumption	Unit value (\$/t)	Unit value (98\$/t)	World production
1900			31,700					31,700	659	13,000	
1901			33,800					33,800	368	7,200	
1902			38,600				15,000	53,600	591	11,000	
1903			37,700				18,400	41,000	619	11,000	
1904			37,600				15,000	34,200	617	11,000	
1905			40,100					25,100	692	13,000	93,600
1906			45,800					45,800	877	16,000	98,400
1907			37,400					37,400	842	15,000	93,800
1908			37,400					37,400	650	12,000	106,000
1909			43,200					43,200	655	12,000	106,000
1910			47,700					47,700	752	13,000	105,000
1911			48,600					48,600	933	16,000	112,000
1912			52,600					52,600	1,020	17,000	122,000
1913			47,500					47,500	977	16,100	136,000
1914			43,100					43,100	756	12,300	128,000
1915			52,400	346				52,100	851	13,700	129,000
1916	2,050		62,600	456				64,200	959	14,300	128,000
1917	5,500		65,500	267				70,700	1,360	17,300	135,000
1918	9,330		64,600	258				73,700	1,960	21,200	128,000
1919	11,100		40,700	346				51,400	1,400	13,200	123,000
1920	16,000		57,000	942				72,000	1,060	8,660	126,000
1921	10,500		24,600	1,420				33,600	659	5,990	110,000
1922	8,260		61,200	1,120				68,300	719	6,980	127,000
1923	6,770		70,000	1,060				75,800	941	8,970	130,000
1924	441		66,100	974				65,600	1,110	10,500	142,000
1925			77,900	947				76,900	1,280	11,800	147,000
1926			78,400	2,010				76,400	1,440	13,200	146,000
1927			72,300	2,270				71,600	1,420	13,300	161,000
1928			79,200	1,640				78,400	1,110	10,600	180,000
1929			88,500	1,960				87,000	996	9,490	196,000
1930			82,000	2,270				81,900	699	6,850	179,000
1931			67,100	1,690				66,700	540	5,780	149,000
1932			35,400	1,130				32,500	485	5,790	96,500
1933			64,700	1,060				66,700	862	10,800	90,400
1934			40,600	1,240			16,800	48,500	1,150	14,000	122,000
1935			65,300	2,330			18,000	64,200	1,110	13,200	137,000
1936			77,200	392			26,600	85,400	1,020	12,000	182,000

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1937			89,500	318			32,300	94,900	1,200	13,600	213,000
1938			50,500	208			27,600	45,600	933	10,800	166,000
1939		15,300	71,200	2,140			37,700	94,500	1,110	13,000	180,000
1940	1,410	18,600	127,000	2,710		21,800	79,600	208,000	1,100	12,800	240,000
1941	1,870	26,900	79,300	1,770		50,800	76,600	132,000	1,150	12,700	244,000
1942	16,400	21,600	27,200	416			45,000	33,200	1,150	11,500	124,000
1943	21,800	22,800	12,100	1,800	-14,100		25,300	21,200	1,150	10,800	146,000
1944	31,400	19,400	13,600	857	-16,000	40,500	21,500	84,100	1,150	10,600	102,000
1945	41,100	21,800	8,630	896	0	12,300	16,000	37,000	1,150	10,400	88,400
1946	22,500	15,900	15,800	895	0	22,600	29,900	77,500	1,200	10,000	89,400
1947	33,800	17,200	25,300	427	0	12,300	33,700	69,500	1,720	12,500	115,000
1948	37,300	18,200	50,000	93	0	36,800	27,600	124,000	2,190	14,800	156,000
1949	36,400	15,000	61,200	156	0	22,800	34,000	105,000	2,190	15,000	164,000
1950	33,600	21,900	84,200	812	0	18,900	37,700	139,000	2,110	14,200	172,000
1951	32,100	20,800	28,700	1,540	0	6,860	23,100	53,400	2,800	17,600	172,000
1952	23,200	20,800	81,800	386	0	13,500	29,900	139,000	2,660	16,300	177,000
1953	38,200	19,400	75,900	206	0	18,800	28,200	137,000	2,110	12,900	193,000
1954	27,800	17,300	57,500	835	0	1,370	31,600	87,800	2,020	12,300	192,000
1955	22,700	19,800	65,900	1,120	0	2,320	35,900	113,000	2,090	12,700	200,000
1956	17,900	17,900	63,600	904	0	1,030	37,000	99,600	2,240	13,400	203,000
1957	1,590	14,600	57,100	1,560	0	0	36,300	71,000	2,120	12,300	204,000
1958		13,800	41,800	1,360	0	0	35,200	53,100	2,100	11,800	156,000
1959		13,700	44,300	1,390	0	0	41,900	63,200	2,250	12,600	164,000
1960		12,500	40,200	871	0	0	40,800	50,600	2,240	12,300	183,000
1961		12,000	40,500	813	0		43,200	54,100	2,500	13,600	191,000
1962		11,900	42,100	442	1,420		37,900	49,600	2,530	13,600	193,000
1963		12,900	44,000	1,650	9,470		46,700	73,400	2,570	13,700	193,000
1964		14,000	32,600	4,110	31,700		38,100	65,600	3,480	18,300	197,000
1965	3,150	15,200	41,500	2,870	11,700		41,900	72,500	3,930	20,300	202,000
1966	3,890	15,600	42,300	2,890	15,200		38,600	70,800	3,620	18,200	211,000
1967	3,100	13,700	51,000	3,310	6,190		36,900	69,000	3,380	16,500	215,000
1968	3,510	13,600	58,300	2,480	2,910		36,500	75,500	3,270	15,300	230,000
1969	351	13,900	55,800	2,950	1,680		31,100	63,400	3,620	16,120	227,000
1970		12,100	51,400	4,520	3,520		26,700	58,100	3,840	16,110	230,000
1971	4,060	11,500	47,700	2,300	1,760		25,200	61,200	3,690	14,850	233,000
1972	4,270	11,400	53,300	1,150	237		25,800	68,600	3,910	15,250	243,000
1973	4,880	11,900	46,600	3,460	12,900		24,400	71,400	5,020	18,410	236,000

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1974	6,100	11,700	40,200	8,550	30,700		21,700	77,600	8,740	28,880	231,000
1975	6,500	9,130	44,400	3,600	813		21,600	57,000	7,490	22,690	225,000
1976	5,730	10,100	45,100	2,340	3,640		17,900	58,500	8,370	23,980	225,000
1977	6,720	11,300	47,800	5,480	2,680		21,300	66,500	11,800	31,710	231,000
1978	5,900	13,500	46,800	4,630	345		17,200	57,700	13,900	34,680	244,000
1979	4,600	13,400	48,400	569	0		16,600	65,200	16,200	36,440	256,000
1980	3,000	11,700	46,000	595	25		12,100	55,600	18,700	36,900	246,000
1981	2,000	10,400	45,900	2,360	5,920		11,100	60,800	16,200	28,970	253,000
1982	3,500	10,400	27,900	5,770	4,170		10,300	39,300	14,400	24,350	241,000
1983	2,500	10,800	34,000	1,340	2,870		9,860	48,400	14,400	23,620	212,000
1984	4,000	11,100	41,200	1,430	2,400		9,680	57,200	13,800	21,590	209,000
1985	4,300	10,000	33,800	1,490	3,010		36,500	76,500	13,100	19,910	190,000
1986	4,350	10,200	35,800	1,550	5,490		13,900	31,600	8,450	12,560	181,000
1987	5,280	11,500	41,200	1,320	4,080		14,500	61,300	9,230	13,240	179,000
1988	2,050	11,300	43,500	1,210	2,390		15,000	58,600	9,730	13,410	201,000
1989	1,570	11,000	34,000	904	2,780		14,700	48,100	11,500	15,080	216,000
1990		13,200	33,800	658	2,150		17,300	51,100	8,520	10,620	220,000
1991		8,800	29,100	970	6,200		13,800	39,600	8,000	9,572	197,000
1992		8,900	27,300	1,890	6,310		10,700	37,500	8,870	10,310	179,000
1993		6,900	33,700	2,600	6,020		10,800	44,100	7,710	8,703	180,000
1994		7,400	32,400	2,560	5,620		10,400	42,500	8,140	8,949	184,000
1995		7,720	33,200	2,790	11,500		11,700	50,900	9,160	9,800	189,000
1996		7,710	30,200	3,670	11,800		10,900	45,200	9,090	9,448	196,000
1997		7,830	40,600	4,660	11,700		11,100	55,700	8,410	8,542	211,000
1998		7,900	39,000	5,000	11,000		11,000	52,800	8,230	8,230	216,000

Tin Worksheet Notes

Data Sources

The sources of data for the tin worksheet were the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR), and Mineral Commodity Summaries (MCS) and its predecessor, Commodity Data Summaries (CDS) and Metal Prices in the United States through 1998 (MP98). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data either were not available or were being withheld because they are proprietary.

Primary Production

Primary U.S. tin production data report the amount of refined tin. Data were from the MR for the years 1916–23 and from the MYB for the years 1924 and 1940–54 and the MCS and CDS for the years 1965–89. Blank cells in the worksheet indicate that company proprietary data for the years 1958–64 and 1993 were withheld. The remaining blanks indicate that data were not available for the years 1900–15, 1925–39, 1990–92, and 1994–98.

Secondary Production

Secondary production includes old scrap (scrap including—but not limited to—metal articles that have been discarded after serving a useful purpose). Data were from the MYB. Blank cells in the worksheet indicate that data were not available for the years 1900–38.

Imports

Import data report the amounts of refined tin imported into the United States in various shapes and forms. Import data exclude all manufactured tin products. Data were from the MYB and MR for the years 1900–54 and the MCS and CDS for the years 1955–98.

Exports

Export data report the amounts of refined tin exported from the United States in various shapes and forms. Export data exclude all manufactured tin products. Data were from the MYB and MR for the years 1915–54 and the MCS and CDS from 1955–98. Blank cells in the worksheet indicate that data were not available for the years 1900–14.

Government Shipments

Government shipment data were for shipments from the government stockpile. Negative numbers for government shipments indicate U.S. Government purchases for refined tin. Data were from the MYB for 1943–54 and the MCS and CDS for 1955–98. Blank cells in the worksheet indicate that data were not available for the years 1900–42.

Government Stocks

Data is for the Reconstruction Finance Corporation—Federal Facilities Corporation (U.S. Government) nonstockpile stocks. Data were from the MYB. Blank cells in the worksheet indicate that data were not available for the years 1900–39, 1942–43, and 1961–98.

Industry Stocks

Stocks include virgin, secondary old scrap, and shipments of tin. Data were from the MR for 1902–04, the MYB for 1934–54 and the MCS and CDS for 1955–98. Blank cells in the worksheet indicate that data were not available for the years 1900–01 and 1905–33.

Apparent Consumption

Apparent consumption was estimated for the years 1900–98 by using the formula:

$$\text{APPARENT CONSUMPTION} = \text{PRODUCTION} + \text{IMPORTS} - \text{EXPORTS} \pm \text{GOVERNMENT SHIPMENTS} \pm \text{CHANGES IN STOCKS}.$$

Unit Value (\$/t)

Unit value is the value in dollars of 1 metric ton (t) of apparent consumption. Unit value (\$/t) was estimated in actual dollars for 1900–98 from a price series for domestic refined tin from MP98.

Unit Value (98\$/t)

Dividing the consumer price index conversion factor with 1998 as the base year into the “Unit Value,” determined previously, results in unit value in constant 1998 U.S. dollars.

World Production

World production data were for tin content of mine and mill production. Data were from the MYB and MR. Blank cells in the worksheet indicate that data were not available for the years 1900–04.

References

- U.S. Bureau of Mines, 1927–34, Mineral Resources of the United States, 1924–31.
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